

Rover

Purpose: To provide Forward Air Controllers (FAC's) and artillery Forward Observers (FO's) the ability to view real time video on the battlefield from several platforms, including Unmanned Aerial Vehicles (UAV) and aircraft with Litening Pod, thus enhancing targeting confidence, situational awareness, and anti-fratricide features.



Background: FAC's and FO's require the capability to maneuver into a position to provide timely and accurate precision target locating data to CAS aircraft and other weapons systems conducting combat operations. Often, the terrain and hostile fires preclude the FAC or FO from having a clear view of a potential target area. They are currently dependent on their best estimate of the location or still imagery that is often outdated by the time the mission is required. There is the potential that the enemy has moved, non-combatants have entered the target area, and more seriously, friendly forces are dangerously close to the target area. In complex terrain, such as urban environments, particular buildings or streets are difficult to differentiate leading to inefficient or inaccurate use of fires. StrikeLink is a USMC Program of Record (POR) that is addressing these problems. This effort is based on a USMC and JSOC urgent need (Jan 04). It will leverage current capabilities in the aviation community to include the Litening Pod video. Rover is one of several Lab Advanced Development initiatives supporting the StrikeLink POR. This video imaging capability will provide the FAC/FO with real-time visual capability, which allows for pinpoint accuracy and pilot/observer target concurrence.

Description: Rover is a Lab initiative to be performed by Stauder Technologies, Inc., supported by MAWTS-1, 2dMAW, 3dMAW, and is in coordination with MCSC as an incremental improvement to the StrikeLink POR. This effort will integrate the Rover capabilities with the StrikeLink software, and its communication protocols with the StrikeLink communication systems. Rover consists of: a lightweight man-packable video imaging receiver; video imaging software and firmware will be loaded onto a ruggedized, light-weight computer with a moving map capability, laser range finder interface, and appropriate tactical radios; and an interface with the StrikeLink target handoff system to facilitate rapid, digital target planning and execution.

Deliverable Products: Software modules and a field capable prototype.

Milestones:

TASKS	FY05	FY06
Software Integration	▲—▲	
Gov't Testing/Demo		▲
Transition to PoR		▲—▲

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